Developments of Roads and Drains at Attur, Ananthapura, 3rd Phase Sanitary Core Areas and Drilling of Borewells and Providing Pipe line at SC/ST Areas in Ward No:03 and 04 of Yelahanka Division (Package:09)"

Second and Part Bill

Quality Control Reports

BOOK NO-02

QC ABSTRACT

NAME OF WORK: "Developments of Roads and Drains at Attur, Ananthapura, 3rd Phase Sanitary Core Areas and Drilling of Borewells and Providing Pipe Line at SC/ST Areas in Ward No:03 and 04 of Yelahanka Division (Package no:09)."

L NO	Item Of Work	Name of Test	Frequency of Test/Quantity	Executed Quantity	Number of Tests Required	Number of Tests Conducted
		Materials				
1	Cement	Fineness by dry sieving	One Test		1	1
		Finess by Air permeablity method	One Test		1	1
		Density	One Test		1	1
		Standard Consistency	One Test		1	1
		Initial Setting time	One Test		1	1
		Final Setting time	One Test		1	1
		Soundness (Le Chatelier's Method)	One Test		1	1
		Compressive Strength	One Test		1	1
2	Coarse aggregate(40 mm down size)	SIEVE ANALYSIS	One Test		1	1
		Flakiness Index	One Test		1	1
		Elongation Index	One Test		1	1
		Specific Gravity	One Test		1	1
		Bulk Density(Loose)	One Test		1	1
		Bulk Density(Compacted)	One Test		1	1
		Water Absorption	One Test		1	1
3	Coarse aggregate(20 mm down size)	SIEVE ANALYSIS	One Test		1	1
		Flakiness Index	One Test		1	1
		Elongation Index	One Test		1	1
		Specific Gravity	One Test		1	1
		Bulk Density(Loose)	One Test		1	1
		Bulk Density(Compacted)	One Test		1	1
		Water Absorption	One Test		1	1
		Aggregate crushing Value	One Test		1	1
		Aggregate Impact Value	One Test		1	1
4	Fine aggregate	SIEVE ANALYSIS	One Test		1	1
		Water Absorption	One Test		1	1
		Specific Gravity	One Test		1	1
		Material finer than 75 micron	One Test		1	1
5	Steel	Bend test	One Test		1	1
		Tensile Test	One Test		1	1
		Yield Test	One Test		1	1
		ReBend test	One Test		1	1
6	KERB	Core Compressive strength	One Test		1	1
		Corrected Cylinder Compressive strength	One Test		1	1
		Equivalent Cube Compressive strength	One Test		1	1
7	Precast (100mm)	Core Compressive Strength	One Test		1	1
		Corrected Cylinder Compressive Strength	One Test		1	1
		Equivalent Cube Compressive Strength	One Test		1	1

					1	1
8	Precast (250mm)	Core Compressive Strength	One Test		1	1
		Corrected Cylinder Compressive Strength	One Test		1	1
		Equivalent Cube Compressive Strength	One Test		1	1
9	RCC(M20)	Compressive Strength(7days and 28days)	8 set /200-250 cum	245.49	16	16
10	Cement Concrete Pavemet (M30)	Compressive Strength(7days and 28days)	5 set /51-100 cum	55.76	10	10
11	GSB	SIEVE ANALYSIS	One Test		1	1
12	WMM	Sieve Analysis	One Test		1	1
		Impact Value	One Test		1	1
		Flakiness Index	One Test		1	1
		Elongation Index	One Test		1	1

Format No: CP/TF/01

TEST REPORT OF PHYSICAL PROPERTIES OF CEMENT - 53 Grade

Lab ID	:	CP-2021-04-10-13 **Date: 06-04-21**
Project Name	:	"Developments of Roads and Drains at Attur, Ananthapura, 3rd Phase Sanitary Core Areas and Drilling of Borewells and Providing Pipe Line at SC/ST Areas in Ward No:03 and 04 of Yelahanka Division (Package no:09)."
Agency	:	Sri.K.Venkata Raju, No:23, RMV 2nd Stage, Nagashettyhalli, Near Akai Public School, Bangalore-560094.
Customer's Reference	:	BBMP/EE/YNK.D/EPMT-05/W.O/186/2020-21
Date of Receipt	:	02-04-21
Sample Type	:	Birla Super 53grade
Reference to BIS codes	:	IS 12269 : 2013, 53 Grade Ordinary Portland cement Specification , IS 4031 (Part 1,2 3,4,5, 6,11):1988 IS 4031 Part 1 DETERMINATION OF FINENESS BY DRY SIEVING, Clause 4.4 IS 4031 Part 2, Determination of Fineness by Blaine Air Permeability Method, Clause 5 IS 4031 Part 3, Determination of Soundness, Clause 5,Clause 6 IS 4031 Part 4, Determination of Consistency of Standard Cement Paste, Clause 5 IS 4031 Part 5, Determination of Initial & Final Setting Time, Clause 5 IS 4031 Part 11,DETERMINATION OF DENSITY , Clause 6
Date of test	:	03-04-21
Environmental Conditions during test	:	Temperature: 26°C Humidity: 72%

Sl.No.	Physical properties	Results	Requirement as per IS 12269: 2013
1	Fineness by dry sieving (%)	1.87	–
2	Finess by Air permeablity method (m^2/kg,Min)	348.6	225m^2/kg, Min
3	Density (gm/cc)	3.12	–
4	Standard Consistency (%)	28.5%	Not specified
5	Initial Setting time	135 minutes	Not less than 30 minutes
6	Final Setting time	245 minutes	Not more than 600 minutes
7	Soundness (Le Chatelier's Method)	1.5mm	Not more than 10 mm

* The results obtained are satisfactory as per standard requirements.

CIVIL Pro Sig..... Date..... BANGALORE

FOR CIVIL Pro.

R KARTHIK RECHAN
Authorized Signatory
Quality Manager

****End of Report****

M : 9972924526 | Tel : +91 80 23444801 | e : rechan6630@yahoo.co.in, civilproexports@gmail.com
HIGHWAY & BUILDING MATERIALS TESTING LABORATORY | STRUCTURAL | ENVIRONMENTAL
WATER TESTING | GEO TECHNICAL | PROJECT MANAGEMENT | SURVEYING SERVICES

Format No: CP/TF/01

TEST REPORT OF PHYSICAL PROPERTIES OF CEMENT - 53 Grade

Date: 01-05-21

Lab ID	:	**CP-2021-04-10-13**
Project Name	:	"Developments of Roads and Drains at Attur, Ananthapura, 3rd Phase Sanitary Core Areas and Drilling of Borewells and Providing Pipe Line at SC/ST Areas in Ward No:03 and 04 of Yelahanka Division (Package no:09)."
Agency	:	Sri.K.Venkata Raju, No:23, RMV 2nd Stage, Nagashettyhalli, Near Akai Public School, Bangalore-560094.
Customer's Reference	:	BBMP/EE/YNK.D/EPMT-05/W.O/186/2020-21
Date of Receipt	:	02-04-21
Sample Type	:	Birla Super 53grade
Reference to BIS codes	:	IS 12269 : 2013, 53 Grade Ordinary Portland cement Specification , IS 4031 Part 4, Determination of Consistency of Standard Cement Paste, Clause 5 IS 4031 Part 6, Determination of Compressive Strength, Clause 6
Date of test	:	03-04-21
Environmental Conditions during test	:	Temperature: 26°C Humidity: 72%

Compressive Strength

Sl.No.	Physical properties	Results	Requirement as per IS 12269: 2013
1	3 Days	28.5N/mm^2	Not less than 27 N/mm^2
2	7 Days	39.0N/mm^2	Not less than 37 N/mm^2
3	28 Days	58.5N/mm^2	Not less than 53 N/mm^2

* The results obtained are satisfactory as per standard requirements.

CIVIL PRO Sig..... Date..... BANGALORE

FOR CIVIL Pro.

R KARTHIK RECHAN
Authorized Signatory
Quality Manager

****End of Report****

M : 9972924526 | Tel : +91 80 23444801 | e : rechan6630@yahoo.co.in, civilproexperts@gmail.com

HIGHWAY & BUILDING MATERIALS TESTING LABORATORY | STRUCTURAL | ENVIRONMENTAL
WATER TESTING | GEO TECHNICAL | PROJECT MANAGEMENT | SURVEYING SERVICES

Format No: CP/TF/01

TEST REPORT ON COARSE AGGREGATES

Lab ID : CP-2021-04-10-13 **Date: 06-04-21**

Project Name : "Developments of Roads and Drains at Attur, Ananthapura, 3rd Phase Sanitary Core Areas and Drilling of Borewells and Providing Pipe Line at SC/ST Areas in Ward No:03 and 04 of Yelahanka Division (Package no:09)."

Agency : Sri.K.Venkata Raju, No:23, RMV 2nd Stage, Nagashettyhalli, Near Akai Public School, Bangalore-560094.

Customer's Reference : BBMP/EE/YNK.D/EPMT-05/W.O/186/2020-21

Date of Receipt : 02-04-21

Sample Type : 40mm down size coarse aggregate

Reference to BIS codes : IS: 383:2016 (Specification for Coarse and fine Aggregates)
IS: 2386 :1963(Part - 1,3,4) RA2011
IS 2386 Part 1: Particle Size and Shape
IS 2386 Part 3: Specific gravity, Density, Voids,Water Absorption
IS 2386 Part 4: Mechanical Properties

Date of test : 02-04-21

SIEVE ANALYSIS (PARTICLE SIZE DISTRIBUTION) OF 40MM DOWN COARSE AGGREGATE:

Total weight taken : **15000** **grams**

Sample No.	Sieve No.	Weight Retained in gms	Cumulative Weight Retained in gms	% Cumulative Weight Retained	% Passing	Required as per IS 383:2016
1	80 mm	0	0	0.0	100	100
2	40 mm	215	215	1.4	98.6	90-100
3	20 mm	7455	7670	51.1	48.9	30-70
4	10 mm	4266	11936	79.6	20.4	10-35
5	4.75 mm	2844	14780	98.5	1.5	0-5
6	Pan	220	15000	100.0	0	---

CIVIL Pro Sig..... Date..... BANGALORE

Format No: CP/TF/01

TEST REPORT ON COARSE AGGREGATES

Lab ID : **CP-2021-04-10-13** **Date: 06-04-21**

PHYSICAL PROPERTIES

Sl.no	Tests	Result	Requirements as per IS:383-2016
1	Flakiness Index(%)	11.9	Combined Flakiness & Elongation Index Shall not Exceed 40% for Uncrushed & Crushed Aggregate
2	Elongation Index(%)	12.3	
3	Specific Gravity	2.64	–
4	Bulk Density(Loose) (Kg/l)	1.41	–
5	Bulk Density(Compacted) (Kg/l)	1.47	–
6	Water Absorption(%)	0.23	–

• The results obtained are satisfactory as per standard requirements.

CIVIL Pro Sig..... Date..... BANGALORE

FOR CIVIL Pro.

R KARTHIK RECHAN
Authorized Signatory
Quality Manager

****End of Report****

M : 9972924526 | Tel : +91 80 23444801 | e : rechan6630@yahoo.co.in, civilproexperts@gmail.com
HIGHWAY & BUILDING MATERIALS TESTING LABORATORY | STRUCTURAL | ENVIRONMENTAL
WATER TESTING | GEO TECHNICAL | PROJECT MANAGEMENT | SURVEYING SERVICES

Format No: CP/TF/01

TEST REPORT ON COARSE AGGREGATES

Date: 06-04-21

Lab ID	:	**CP-2021-04-10-13**
Project Name	:	"Developments of Roads and Drains at Attur, Ananthapura, 3rd Phase Sanitary Core Areas and Drilling of Borewells and Providing Pipe Line at SC/ST Areas in Ward No:03 and 04 of Yelahanka Division (Package no:09)."
Agency	:	Sri.K.Venkata Raju, No:23, RMV 2nd Stage, Nagashettyhalli, Near Akai Public School, Bangalore-560094.
Customer Reference	:	BBMP/EE/YNK.D/EPMT-05/W.O/186/2020-21
Date of Receipt	:	02-04-21
Sample Type/ Size	:	20mm down size coarse aggregate
Reference to BIS codes	:	IS: 383:2016 (Specification for Coarse and fine Aggregates) IS: 2386 :1963(Part - 1,3,4) RA2011 IS 2386 Part 1: Particle Size and Shape IS 2386 Part 3: Specific gravity, Density, Voids,Water Absorption IS 2386 Part 4: Mechanical Properties
Date of test	:	02-04-21

SIEVE ANALYSIS (PARTICLE SIZE DISTRIBUTION) OF 20MM DOWN COARSE AGGREGATE:

Total weight taken : 5000 grams

Sample No.	Sieve No.	Weight Retained in gms	Cumulative Weight Retained in gms	% Cumulative Weight Retained	% Passing	Required as per IS 383:2016
1	40 mm	0	0	0	100	100
2	20 mm	225	225	4.5	95.5	90-100
3	10 mm	2845	3070	61.4	38.6	25-55
4	4.75 mm	1745	4815	96.3	3.7	0-10
5	Pan	185	5000	100	0	-

CIVIL PRO Sig ..... Date..... BANGALORE

M : 9972924526 | Tel : +91 80 23444801 | e : rechan6630@yahoo.co.in, civilproexperts@gmail.com

Format No: CP/TF/01

TEST REPORT ON COARSE AGGREGATES

Lab ID : **CP-2021-04-10-13** **Date: 06-04-21**

PHYSICAL PROPERTIES

Sl.no	Tests	Result	Requirements as per IS:383-2016
1	Flakiness Index(%)	13.2	Combined Flakiness & Elongation Index Shall not Exceed 40% for Uncrushed & Crushed Aggregate
2	Elongation Index(%)	10.1	
3	Specific Gravity	2.68	–
4	Bulk Density(Loose) (Kg/l)	1.43	–
5	Bulk Density(Compacted) (Kg/l)	1.49	–
6	Water Absorption(%)	0.23	–
7	Aggregate crushing Value(%)	22.9	Max 30% for Aggregates to be used in concrete for wearing Surface. In case Aggregate Crushing Value Exceeds 30% then the test for ten percent fines should be conducted for Aggregates to be used in concrete other than for wearing Surface
8	Aggregate Impact Value(%)	23.7	30% for Aggregates to be used in concrete for wearing Surface. 45% for Aggregates to be used in concrete other than for wearing Surface

* The results obtained are satisfactory as per standard requirements.

CIVIL Pro Sig..... Date..... BANGALORE

FOR CIVIL Pro.

R KARTHIK RECHAN
Authorized Signature
Quality Manager

M : 9972924526 | Tel : +91 80 23444801 | e : rechan6630@yahoo.co.in, civilproexperts@gmail.com

HIGHWAY & BUILDING MATERIALS TESTING LABORATORY | STRUCTURAL| ENVIRONMENTAL
WATER TESTING | GEO TECHNICAL | PROJECT MANAGEMENT | SURVEYING SERVICES

Format No: CP/TF/01

TEST RESULTS OF STEEL

Date: 03-04-21

Lab ID	:	**CP-2021-04-10-13**
Project Name	:	"Developments of Roads and Drains at Attur, Ananthapura, 3rd Phase Sanitary Core Areas and Drilling of Borewells and Providing Pipe Line at SC/ST Areas in Ward No:03 and 04 of Yelahanka Division (Package no:09)."
Agency	:	Sri.K.Venkata Raju, No:23, RMV 2nd Stage, Nagashettyhalli, Near Akai Public School, Bangalore-560094.
Customer's Reference	:	BBMP/EE/YNK.D/EPMT-05/W.O/186/2020-21
Date of Receipt	:	02-04-21
Sample Type	:	Sunvik
Reference to BIS codes	:	IS 1786-2008, IS:1608-2005(RA 2011), IS 1599-2012.
Date of test:	:	02-04-21

Sl.No	Identification of sample	Grade of the sample	Diameter of the steel bar	Weight of the sample	Yield stress	Tensile strength	Elongation	Bend test	Rebend test
			(mm)	(kg/m)	(N/mm2)	(N/mm2)	(%)		
1	Sunvik	Fe500	8	0.391	512	652	20.0%	Satisfactory	Satisfactory
2	Sunvik	Fe500	10	0.616	528	672	20.0%	Satisfactory	Satisfactory
3	Sunvik	Fe500	12	0.888	544	668	20.0%	Satisfactory	Satisfactory

* The results obtained are satisfactory as per standard requirements.

CIVIL Pro Sig ..... Date..... BANGALORE

FOR CIVIL Pro.

R KARTHIK RECHAN
Authorized Signatory
Quality Manager

End of Report

M : 9972924526 | Tel : +91 80 23444801 | e : rechan6630@yahoo.co.in, civilproexperts@gmail.com

HIGHWAY & BUILDING MATERIALS TESTING LABORATORY | STRUCTURAL | ENVIRONMENTAL
WATER TESTING | GEO TECHNICAL | PROJECT MANAGEMENT | SURVEYING SERVICES

Format No: CP/TF/01

TEST REPORT OF PRECAST COVER SLAB

Date: 10-04-21

ID	:	CP-2021-04-10-13
ect Name	:	"Developments of Roads and Drains at Attur, Ananthapura, 3rd Phase Sanitary Core Areas and Drilling of Borewells and Providing Pipe Line at SC/ST Areas in Ward No:03 and 04 of Yelahanka Division (Package no:09)."
ıcy	:	Sri.K.Venkata Raju, No:23, RMV 2nd Stage, Nagashettyhalli, Near Akai Public School, Bangalore-560094.
omer's Reference	:	BBMP/EE/YNK.D/EPMT-05/W.O/186/2020-21
of Receipt	:	06-04-21
ple Type /Size	:	Precast Cover Slab (100mm)
·ence to BIS codes	:	IS: 516 - 1959 Methods of Tests for Strength of Concrete
of test	:	06/04/2021

Identification Mark	Diameter of the core	Height of the core	Weight of the core	Area	Failure Load	Core Compressive strength	Corrected Cylinder Compressive strength	Equivalent Cube Compressive strength
	(mm)	(mm)	(kg)	(Sq.mm)	(KN)	(N/mm^2)	(N/mm^2)	(N/mm^2)
Cover Slab-1	75.51	100.48	1.116	4477	80.9	18.1	16.8	21.0
Cover Slab-2	75.49	100.52	1.122	4475	82.3	18.4	17.1	21.4
Cover Slab-3	75.50	100.51	1.118	4476	81.5	18.2	16.9	21.2

results obtained are satisfactory as per standard requirements.

CIVIL Pro Sig ..... Date..... BANGALORE

FOR CIVIL Pro.

R KARTHIK RECHAN
Authorized Signatory
Quality Manager

****End of Report****

M : 9972924526 | Tel : +91 80 23444801 | e : rechan6630@yahoo.co.in, civilproexperts@gmail.com

HIGHWAY & BUILDING MATERIALS TESTING LABORATORY | STRUCTURAL | ENVIRONMENTAL
WATER TESTING | GEO TECHNICAL | PROJECT MANAGEMENT | SURVEYING SERVICES

Format No: CP/TF/01

TEST REPORT OF PRECAST COVER SLAB

Date: 10-04-21

ID : CP-2021-04-10-13

ect Name : "Developments of Roads and Drains at Attur, Ananthapura, 3rd Phase Sanitary Core Areas and Drilling of Borewells and Providing Pipe Line at SC/ST Areas in Ward No:03 and 04 of Yelahanka Division (Package no:09)."

ıcy : Sri.K.Venkata Raju, No:23, RMV 2nd Stage, Nagashettyhalli, Near Akai Public School, Bangalore-560094.

omer's Reference : BBMP/EE/YNK.D/EPMT-05/W.O/186/2020-21

of Receipt : 06-04-21

ple Type /Size : Precast Cover Slab (250)

ence to BIS codes : IS: 516 - 1959 Methods of Tests for Strength of Concrete

of test : 06/04/2021

Identification Mark	Diameter of the core	Height of the core	Weight of the core	Area	Failure Load	Core Compressive strength	Corrected Cylinder Compressive strength	Equivalent Cube Compressive strength
	(mm)	(mm)	(kg)	(Sq.mm)	(KN)	(N/mm^2)	(N/mm^2)	(N/mm^2)
Cover Slab-1	200.51	250.48	3.116	31570	704.9	22.3	20.8	26.0
Cover Slab-2	200.49	250.52	3.122	31564	701.3	22.2	20.7	25.8
Cover Slab-3	200.50	250.51	3.118	31567	708.5	22.4	20.9	26.1

esults obtained are satisfactory as per standard requirements.

CIVIL Pro Sig ..... Date..... BANGALORE

FOR CIVIL Pro.

R KARTHIK RECHAN
Authorized Signatory
Quality Manager

****End of Report****

M : 9972924526 | Tel : +91 80 23444801 | e : rechan6630@yahoo.co.in, civilproexperts@gmail.com

HIGHWAY & BUILDING MATERIALS TESTING LABORATORY | STRUCTURAL | ENVIRONMENTAL
WATER TESTING | GEO TECHNICAL | PROJECT MANAGEMENT | SURVEYING SERVICES

Format No: CP/TF/01

TEST REPORT OF CEMENT CONCRETE CUBES

Date: 21/04/2021

b ID : CP-2021-04-10-13

oject Name : "Developments of Roads and Drains at Attur, Ananthapura, 3rd Phase Sanitary Core Areas and Drilling of Borewells and Providing Pipe Line at SC/ST Areas in Ward No:03 and 04 of Yelahanka Division (Package no:09)."

ency : Sri.K.Venkata Raju, No:23, RMV 2nd Stage, Nagashettyhalli, Near Akai Public School, Bangalore-560094.

stomer's Reference : BBMP/EE/YNK.D/EPMT-05/W.O/186/2020-21

te of Receipt : 16-04-21

stomer ID : Drain Bottom Slab Concrete, (7th B Main Road Near Hoysala Ground Opposite)

nple Type /Size : 150X150X150 mm

nple grade/Age : M20 / 7 Days Compressive Strength

'erence to BIS codes : IS: 516 - 1959 Methods of Tests for Strength of Concrete Cl.5

e of test : 21/04/2021

Identification Mark	Grade of concrete	Date of Casting	Date of Testing	Dimension of the Specimen (mm)	Cross sectional area (Sq.mm)	Weight of the sample (kg)	Failure Load (KN)	Compressive strength (N/mm²)	Average Compressive Strength (N/mm²)
Drain Bottom Slab Concrete	M20	14/04/2021	21/04/2021	150 93 X 151 61 X 150 99	22882	8.640	424 6	18 6	18.3
Drain Bottom Slab Concrete	M20	14/04/2021	21/04/2021	149 72 X 149 78 X 149 89	22425	8.766	405 3	18 1	
Drain Bottom Slab Concrete	M20	14/04/2021	21/04/2021	151 45 X 150 15 X 150 89	22740	8.314	414 0	18 2	

results obtained are satisfactory as per standard requirements.

CIVIL Pro Sig..... Date..... BANGALORE

FOR CIVIL Pro.

K KARTHIK RECHAN
Authorized Signatory
Quality Manager

****End of Report****

: 9972924526 | Tel : +91 80 23444801 | e : rechan6630@yahoo.co.in, civilproexperts@gmail.com

HIGHWAY & BUILDING MATERIALS TESTING LABORATORY | STRUCTURAL | ENVIRONMENTAL
WATER TESTING | GEO TECHNICAL | PROJECT MANAGEMENT | SURVEYING SERVICES

Format No: CP/TF/01

TEST REPORT OF CEMENT CONCRETE CUBES

Date: 26/04/2021

ID : CP-2021-04-10-13

ect Name : "Developments of Roads and Drains at Attur, Ananthapura, 3rd Phase Sanitary Core Areas and Drilling of Borewells and Providing Pipe Line at SC/ST Areas in Ward No:03 and 04 of Yelahanka Division (Package no:09)."

ıcy : Sri.K.Venkata Raju, No:23, RMV 2nd Stage, Nagashettyhalli, Near Akai Public School, Bangalore-560094.

omer's Reference : BBMP/EE/YNK.D/EPMT-05/W.O/186/2020-21

of Receipt : 21-04-21

omer ID : Drain Bottom Slab Concrete, (LIG 3rd Phase Park Left Side)

ıle Type /Size : 150X150X150 mm

ıle grade/Age : M20 / 7 Days Compressive Strength

ence to BIS codes : IS: 516 - 1959 Methods of Tests for Strength of Concrete Cl.5

of test : 26/04/2021

Identification Mark	Grade of concrete	Date of Casting	Date of Testing	Dimension of the Specimen (mm)	Cross sectional area (Sq.mm)	Weight of the sample (kg)	Failure Load (KN)	Compressive strength (N/mm^2)	Average Compressive Strength (N/mm^2)
Drain Bottom Slab Concrete	M20	19/04/2021	26/04/2021	150.87 X 149.49 X 151.40	22553	8.640	418.0	18.5	18.7
Drain Bottom Slab Concrete	M20	19/04/2021	26/04/2021	151.53 X 151.47 X 150.53	22953	8.766	428.3	18.7	
Drain Bottom Slab Concrete	M20	19/04/2021	26/04/2021	151.54 X 149.35 X 151.48	22633	8.314	426.0	18.8	

esults obtained are satisfactory as per standard requirements.

CIVIL Pro Sig ..... Date..... BANGALORE

FOR CIVIL Pro.

R KARTHIK RECHAN
Authorized Signatory
Quality Manager

****End of Report****

: 9972924526 | Tel : +91 80 23444801 | e : rochan6630@yahoo.co.in, civilproexperts@gmail.com

GHWAY & BUILDING MATERIALS TESTING LABORATORY | STRUCTURAL | ENVIRONMENTAL
WATER TESTING | GEO TECHNICAL | PROJECT MANAGEMENT | SURVEYING SERVICES

Format No: CP/TF/01

TEST REPORT OF CEMENT CONCRETE CUBES

Date: 20/05/2021

: CP-2021-04-10-13

Name : "Developments of Roads and Drains at Attur, Ananthapura, 3rd Phase Sanitary Core Areas and Drilling of Borewells and Providing Pipe Line at SC/ST Areas in Ward No:03 and 04 of Yelahanka Division (Package no:09)."

: Sri.K.Venkata Raju, No:23, RMV 2nd Stage, Nagashettyhalli, Near Akai Public School, Bangalore-560094.

ıer's Reference : BBMP/EE/YNK.D/EPMT-05/W.O/186/2020-21

Receipt : 24-04-21

ıer ID : Drain Side Wall Concrete, (3rd Phase Cross Roads Left Side)

Type /Size : 150X150X150 mm

grade/Age : M20 / 28 Days Compressive Strength

ıce to BIS codes : IS: 516 - 1959 Methods of Tests for Strength of Concrete Cl.5

test : 20/05/2021

Identification Mark	Grade of concrete	Date of Casting	Date of Testing	Dimension of the Specimen (mm)	Cross sectional area (Sq.mm)	Weight of the sample (kg)	Failure Load (KN)	Compressive strength (N/mm^2)	Average Compressive Strength (N/mm^2)
Drain Side Wall Concrete	M20	22/04/2021	20/05/2021	149.18 X 150.07 X 151.86	22387	8.786	515.3	23.0	23.1
Drain Side Wall Concrete	M20	22/04/2021	20/05/2021	151.45 X 150.22 X 149.54	22750	8.695	513.5	22.6	
Drain Side Wall Concrete	M20	22/04/2021	20/05/2021	149.93 X 149.52 X 149.71	22417	8.926	532.6	23.8	

ults obtained are satisfactory as per standard requirements.

CIVIL Pro Sig..... Date..... BANGALORE

FOR CIVIL Pro.

R KARTHIK RECHAN
Authorized Signatory
Quality Manager

****End of Report****

CIVIL PRO
AN ISO 9001 : 2008 COMPANY & NABL ACCREDITED LABORATORY AS PER ISO/IEC 17025:2017
4, 7TH MAIN MALLESWARAM, BANGALORE -3
Certificate No.: TC-5548

Format No: CP/TF/01

TEST REPORT OF CEMENT CONCRETE CUBES

: CP-2021-04-10-13 **Date: 21/05/2021**

ame : "Developments of Roads and Drains at Attur, Ananthapura, 3rd Phase Sanitary Core Areas and Drilling of Borewells and Providing Pipe Line at SC/ST Areas in Ward No:03 and 04 of Yelahanka Division (Package no:09)."

: Sri.K.Venkata Raju, No:23, RMV 2nd Stage, Nagashettyhalli, Near Akai Public School, Bangalore-560094.

s Reference : BBMP/EE/YNK.D/EPMT-05/W.O/186/2020-21

ceipt : 26-04-21

ID : Drain Side Wall Concrete, (3rd Phase Cross Roads Right Side)

pe /Size : 150X150X150 mm

de/Age : M20 / 28 Days Compressive Strength

o BIS codes : IS: 516 - 1959 Methods of Tests for Strength of Concrete Cl.5

: 21/05/2021

ntification Mark	Grade of concrete	Date of Casting	Date of Testing	Dimension of the Specimen (mm)	Cross sectional area (Sq.mm)	Weight of the sample (kg)	Failure Load (KN)	Compressive strength (N/mm^2)	Average Compressive Strength (N/mm^2)
Side Wall ncrete	M20	23/04/2021	21/05/2021	149.15 X 151.96 X 149.78	22666	8.786	523.1	23.1	23.0
Side Wall ncrete	M20	23/04/2021	21/05/2021	151.52 X 150.70 X 149.60	22834	8.695	524.6	23.0	
Side Wall ncrete	M20	23/04/2021	21/05/2021	150.20 X 150.10 X 151.53	22546	8.926	520.5	23.1	

ined are satisfactory as per standard requirements.

CIVIL Pro Sig..... Date..... BANGALORE

FOR CIVIL Pro.

R KARTHIK RECHAN
Authorized Signatory
Quality Manager

****End of Report****

4526 | Tel : +91 80 23444801 | e : rechan6630@yahoo.co.in, civilproexperts@gmail.com
& BUILDING MATERIALS TESTING LABORATORY | STRUCTURAL | ENVIRONMENTAL
TESTING | GEO TECHNICAL | PROJECT MANAGEMENT | SURVEYING SERVICES

Format No: CP/TF/01

TEST REPORT OF CEMENT CONCRETE CUBES

Date: 30/04/2021

: CP-2021-04-10-13

: "Developments of Roads and Drains at Attur, Ananthapura, 3rd Phase Sanitary Core Areas and Drilling of Borewells and Providing Pipe Line at SC/ST Areas in Ward No:03 and 04 of Yelahanka Division (Package no:09)."

t Name : Sri.K.Venkata Raju, No:23, RMV 2nd Stage, Nagashettyhalli, Near Akai Public School, Bangalore-560094.

y : BBMP/EE/YNK.D/EPMT-05/W.O/186/2020-21

mer's Reference : 26-04-21

f Receipt : Culvert Side Wall Concrete

mer ID : 150X150X150 mm

le Type /Size : M20 / 7 Days Compressive Strength

le grade/Age : IS: 516 - 1959 Methods of Tests for Strength of Concrete Cl.5

ence to BIS codes

of test : 30/04/2021

Identification Mark	Grade of concrete	Date of Casting	Date of Testing	Dimension of the Specimen (mm)	Cross sectional area (Sq.mm)	Weight of the sample (kg)	Failure Load (KN)	Compressive strength (N/mm^2)	Average Compressive Strength (N/mm^2)
Culvert Side Wall Concrete	M20	23/04/2021	30/04/2021	151.46 X 149.04 X 150.68	22574	8.640	420.8	18.6	18.6
Culvert Side Wall Concrete	M20	23/04/2021	30/04/2021	149.08 X 151.69 X 150.92	22614	8.766	425.2	18.8	
Culvert Side Wall Concrete	M20	23/04/2021	30/04/2021	151.30 X 150.34 X 151.89	22746	8.314	417.8	18.4	

: results obtained are satisfactory as per standard requirements.

CIVIL Pro Sig..... Date..... BANGALORE

FOR CIVIL Pro.

R KARTHIK RECHAN
Authorized Signatory
Quality Manager

****End of Report****

DETERMINATION OF FLAKINESS INDEX AND ELONGATION INDEX OF COARSE AGGREGATE(IS 2386 (Part 1) 1963 (RA 2007)

ID	:	CP-RW-2021-04-10-13 **Date: 17-04-21**
ect Name	:	"Developments of Roads and Drains at Attur, Ananthapura, 3rd Phase Sanitary Core Areas and Drilling of Borewells and Providing Pipe Line at SC/ST Areas in Ward No:03 and 04 of Yelahanka Division (Package no:09)."
ncy	:	Sri.K.Venkata Raju, No:23, RMV 2nd Stage, Nagashettyhalli, Near Akai Public School, Bangalore-560094.
tomer Reference	:	BBMP/EE/YNK.D/EPMT-05/W.O/186/2020-21
e of Receipt	:	15-04-21
pe of Mix	:	Coarse Aggregate for WMM (Wet Mix Macadam)
te of test	:	15-04-21

sult:

Index	Percentage of Flakiness and Elongation Index	Secified limits as per MORTH specification table 400-12
Flakiness Index	12.8%	Combined Flakiness & Elongation Index for WMM is Maximum 35%
Elongation Index	12.5%	
ombined Flakiness and Elongation Index for WMM	25.3%	

The results obtained are satisfactory as per standard requirements.

CIVIL Pro Sig..... Date..... BANGALORE

FOR CIVIL Pro.

R KARTHIK RECHAN
Authorized Signatory
Quality Manager

: 9972924526 | Tel : +91 80 23444801 | e : rechan6630@yahoo.co.in, civilproexperts@gmail.com

HIGHWAY & BUILDING MATERIALS TESTING LABORATORY | STRUCTURAL | ENVIRONMENTAL
WATER TESTING | GEO TECHNICAL | PROJECT MANAGEMENT | SURVEYING SERVICES

Format No: CP/TF/01

TEST REPORT OF CEMENT CONCRETE CUBES

Date: 05/06/2021

: CP-2021-04-10-13

: "Developments of Roads and Drains at Attur, Ananthapura, 3rd Phase Sanitary Core Areas and Drilling of Borewells and Providing Pipe Line at SC/ST Areas in Ward No:03 and 04 of Yelahanka Division (Package no:09)."

: Sri.K.Venkata Raju, No:23, RMV 2nd Stage, Nagashettyhalli, Near Akai Public School, Bangalore-560094.

Reference : BBMP/EE/YNK.D/EPMT-05/W.O/186/2020-21

ipt : 10-05-21

: Cement Concrete Pavement, (LIG 3rd Phase Cross Road)

/Size : 150X150X150 mm

e/Age : M30 / 28 Days Compressive Strength

BIS codes : IS: 516 - 1959 Methods of Tests for Strength of Concrete Cl.5

: 05/06/2021

tification Mark	Grade of concrete	Date of Casting	Date of Testing	Dimension of the Specimen (mm)	Cross sectional area (Sq.mm)	Weight of the sample (kg)	Failure Load (KN)	Compressive strength (N/mm²)	Average Compressive Strength (N/mm²)
nt Concrete vement	M30	08/05/2021	05/06/2021	149.92 X 150.63 X 150.88	22582	8.766	766.8	34.0	33.3
nt Concrete vement	M30	08/05/2021	05/06/2021	149.57 X 150.30 X 149.07	22482	8.198	735.2	32.7	
nt Concrete vement	M30	08/05/2021	05/06/2021	151.85 X 150.06 X 149.64	22787	9.034	759.0	33.3	

tained are satisfactory as per standard requirements.

CIVIL Pro Sig..... Date..... BANGALORE

FOR CIVIL Pro.

R.KARTHIK RECHAN
Authorized Signatory
Quality Manager

Format No: CP/TF/01

TEST REPORT OF CEMENT CONCRETE CUBES

Date: 15/05/2021

: CP-2021-04-10-13

: "Developments of Roads and Drains at Attur, Ananthapura, 3rd Phase Sanitary Core Areas and Drilling of Borewells and Providing Pipe Line at SC/ST Areas in Ward No:03 and 04 of Yelahanka Division (Package no:09)."

: Sri.K.Venkata Raju, No:23, RMV 2nd Stage, Nagashettyhalli, Near Akai Public School, Bangalore-560094.

ence : BBMP/EE/YNK.D/EPMT-05/W.O/186/2020-21

: 10-05-21

: Cement Concrete Pavement, (LIG 3rd Phase Cross Road)

e : 150X150X150 mm

e : M30 / 7 Days Compressive Strength

: IS: 516 - 1959 Methods of Tests for Strength of Concrete Cl.5

codes

: 15/05/2021

cation rk	Grade of concrete	Date of Casting	Date of Testing	Dimension of the Specimen (mm)	Cross sectional area (Sq.mm)	Weight of the sample (kg)	Failure Load (KN)	Compressive strength (N/mm^2)	Average Compressive Strength (N/mm^2)
Concrete ement	M30	08/05/2021	15/05/2021	150.85 X 149.07 X 149.75	22487	9.039	579.5	25.8	25.6
Concrete ement	M30	08/05/2021	15/05/2021	149.37 X 150.37 X 150.48	22460	8.158	587.6	26.2	
t Concrete vement	M30	08/05/2021	15/05/2021	149.51 X 149.58 X 151.11	22364	8.307	555.3	24.8	

tained are satisfactory as per standard requirements.

CIVIL Pro Sig..... Date..... BANGALORE

FOR CIVIL Pro.

B KARTHIK RECHAN
Authorized Signatory
Quality Manager

Page 1/1
****End of Report****

Format No: CP/TF/01

TEST REPORT OF CEMENT CONCRETE CUBES

Date: 05/06/2021

: CP-2021-04-10-13

: "Developments of Roads and Drains at Attur, Ananthapura, 3rd Phase Sanitary Core Areas and Drilling of Borewells and Providing Pipe Line at SC/ST Areas in Ward No:03 and 04 of Yelahanka Division (Package no:09)."

: Sri.K.Venkata Raju, No:23, RMV 2nd Stage, Nagashettyhalli, Near Akai Public School, Bangalore-560094.

ence : BBMP/EE/YNK.D/EPMT-05/W.O/186/2020-21

: 10-05-21

: Cement Concrete Pavement, (LIG 3rd Phase Cross Road)

ze : 150X150X150 mm

ge : M30 / 28 Days Compressive Strength

S codes : IS: 516 - 1959 Methods of Tests for Strength of Concrete Cl.5

: 05/06/2021

fication lark	Grade of concrete	Date of Casting	Date of Testing	Dimension of the Specimen (mm)	Cross sectional area (Sq.mm)	Weight of the sample (kg)	Failure Load (KN)	Compressive strength (N/mm^2)	Average Compressive Strength (N/mm^2)
nt Concrete avement	M30	08/05/2021	05/06/2021	149.58 X 150.51 X 151.43	22514	8.766	752.3	33.4	33.2
ent Concrete Pavement	M30	08/05/2021	05/06/2021	150.00 X 151.82 X 149.83	22774	8.198	737.8	32.4	
ment Concrete Pavement	M30	08/05/2021	05/06/2021	150.71 X 149.70 X 149.57	22561	9.034	759.0	33.6	

ts obtained are satisfactory as per standard requirements.

FOR CIVIL Pro.

CIVIL Pro Sig..... Date..... BANGALORE

R KARTHIK RECHAN
Authorized Signatory
Quality Manager

Page 1/1
****End of Report****